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DR. VALERJ'S INTRODUCTORY LECTURE.

(Continued from page 321.)

NOT last among the wondrous effects of nature are our *instincts* and *habits*. Instinct consists, as you well know, in certain sensations, passions, appetites, aversions, which, independently of the will, urge man to actions, some of which are necessary, others for the most part useful to his personal safety, to the conservation and propagation of his kind. Habit is that faculty which he possesses of being enabled, by the frequent and continued repetition of any act whatsoever, to vary, moderate, augment, and even annul the impressions caused by the various stimulants acting upon his organs, to nourish himself with variable qualities and quantities of food, to live in different kinds of climate, &c. &c. In life *habit is everything, custom is a second nature;* this is a truth too well known to need any discussion.

In physiological books you will find an ample store of facts upon this subject, as instructive as they are astounding. In the mean time bear well in mind the existence of these two faculties—*instinct* and *habit*—for in the cure of diseases you will find that they exercise a great, though inexplicable influence. How often must we not recur to the habitudes of the patient in regulating the diet, measuring the doses, and the effects of certain remedies? How often must not our curative indications be guided by the mysterious physical or moral impulses of the patient? "*Inest aliquid sapientiæ in aegrotantibus instinctibus,*" exclaimed Boerhaave.

Nor is this the whole category of faculties resulting from the special forces, concordantly and harmoniously acting in our organism; but I have pointed out the principal, and deem them sufficient to make you understand how in the living man all the organs, with the functions, powers and laws derived therefrom, constitute him a *perfect ecomony;* that is, an aggregate of natural and special causes and effects, which, in perfect order, according to fixed methods, and within proper limits, incessantly tend towards its conservation, "*quae nocte atque die nostris rebus invigilat, contulitque.*" It is just to this aggregate, conformably with the definition quoted from Sydenham,

that we have applied the term *Nature*, apprising you, at the same time, that we shall henceforth adopt it in a like sense; a sense unanimously received by all those physicians who, following the doctrine of Hippocrates, cultivate the medical art with positive advantage to humanity.

Having thus defined the word nature, explained its import, and enumerated the principal laws by which it operates in conserving the individual, let us now enter upon the field which more directly concerns us—that of pathology.

Firstly, then, how does nature act in treating with diseases? It is an axiom as ancient as medicine itself, as unanimously proclaimed by the most renowned physicians of all ages and countries as any obvious and common truth can be, that nature cureth diseases. "*Morbis natura medetur*," says Hippocrates, and Sydenham emphatically expresses himself in a like sense as follows:—"*Natura sibi permissa negotium suum in morbis suo tempore exequitur, materiamque morbosam debito ordine ac viâ tum secernit, tum etiam expellit; nostrâ ope, nostris artificiis, atque auxiliis non indigeat, suis viribus instructa, suis operibus locuples, suo tandem ingenio satis edocta.*" In a similar tone, and in phraseology not less impressive, has this truth been proclaimed by Baglivi, and a host of other standard medical practitioners; nor can we peruse a single treatise on pathology or clinics of any account, without finding therein this truth beautifully expounded. This fact, so auspicious for humanity, that nature cureth diseases, might be demonstrated, *à priori*, as a consequence of the definition laid down; namely, that nature, being the cause of man's conservation in his healthful state, must therefore also be a medicatrix in his after state of infirmity. But we should rather prefer carrying out our reasoning by actual proofs.

It is an ever-occurring observation, numerous and striking examples of which you will shortly witness, that out of ten maladies there are two thirds that cure of themselves, thus forming, by their *natural course*, the numerous class of those that terminate happily through the sole influence of the vital motions. Fevers, inflammations, dropsies, bloody fluxus, exanthemata, neuropathies, sores, tumors, &c. &c., not unfrequently heal spontaneously. And not only this, but we find that even pestilential maladies, epidemics, cholera, dysentery, and even the plague itself, are overcome by the sole aid of nature. Never shall be forgotten the fact related by Santorio, a professor of the seventeenth century in the University of Padua, namely, that, of the population affected with the plague, the nobility and wealthy who received medical aid succumbed, while a considerable number of the indigent who were left to themselves recovered. "*Nobilium fere nemo cum remediis sanatur, qui peste laborat, Plebei vero sine iis plures sanantur.*" (Sect. I., affect. 139.) The same may be said of many other maladies, which terminate more happily without the aid of art than with it; the reason of which is most clear, for when nature suffices

of herself to effect the cure, the intervention of the physician and his remedies only act as an obstruction to her perfect operations. Nature frequently resembleth some classic artist executing with incomparable skill a perfect work. Even the slightest touch from another artist, however skilful, could only mar its beauty. When Raphael's pencil, or the great hand that sculptured the *Apollo Belvidere*, were working out their masterpieces, which we so highly admire, could other hands, even the most practised, have touched without spoiling them? The similitude, though unhappy as to the subject, is perfectly *apropos* with regard to the result. And, alas! how often do we not only lack skill, but also, unmindful of the natural course of diseases, militate against, ruin and destroy by *ill-timed indications* and violent remedies the sublime workings of nature, entirely directed towards curing them? "*Natura omnia omnibus sufficit*," exclaims Hippocrates, and self-taught, "*nemine edocta, saepe novum opus exorditur ubi conatus nostri desiere*," adds Baglivi. As she is the efficient cause of health, it is quite natural that she protect it from those vicissitudes apt to disorder it; and this she does by means to us sometimes mysterious, but generally most perceptible.

And what are these means? You are already aware that I would allude to certain crises, or great perturbations, which occur in the course of maladies, accompanied or followed by excretions, or abundant deposits of morbose matter, as, for instance, perspiration, hæmorrhage, an abscess, diarrhœa, sedimentose urine, &c. "*Crisis, aut judicium fit in morbis, quando et magnae perturbationes accidunt, et nova apparent phœnomena; subito, simulque haec apparent sequuntur vel et comitantur insignes excretiones, vel dispositiones humorum in loco quodam corporis, id est abscessus*," *&c.* (Van Swieten, vol. v. p. 34.) You are aware of the many dissensions which have arisen concerning the subject of the crises, and that certain solidists have denied or considered doubtful their existence, holding them as a deceit, a mere effect of superstitiously deluded observation. To my mind the best confutation that could be instituted against this class of physicians would be that of inviting them to visit some hospital, thus imitating Diogenes, whose sole reply to the sophism of Zeno against the *possibility of motion* was to invite him to take a walk through the portico. In that hospital, or in any other assemblage of patients, they might witness, for instance, an epistaxis which frees a plethoric subject from a congestion or cerebral hæmorrhage, already on the point of bringing him to the grave; a profuse perspiration which dissolves a rheumatism; a fit of vomiting which puts a term to a colic of the stomach, occasioned by an indigested meal, or by the absorption of a poison; an abscess, an aposthema which arrests the danger of a malignant fever; a bilious diarrhœa which resolves the jaundice; an abundant expectoration which arrests a violent paroxysm of asthma, or voids a vomica which threatens life itself; a purulent urine which in the course of one night does away with an abscess, which the surgeon's

hand was about to open on the following morning; a parotitis which brings to a favorable issue a maniacal delirium, or a violent nervous fever; a succession of boils which cure a quartan ague, that had for several months been the *opprobrium* of the physicians, or a convulsive cough which had resisted manifold remedies; a profuse diuresis, vainly sought to be promoted by numerous diuretics, which, brought on by the supervention of a passing fever, voids a frightful ascites, resolves an anasarca; and so on with analogous cases. I could, in fact, pass in review the whole lengthy series of the various kinds of diseases, and prove to you by similar facts, that these crises, or evacuations, constitute the sensible mode by which nature oftentimes effects their cure without the physician's aid. I have enumerated to you such of them as occur most frequently, and have chosen those which, impressing more deeply the practitioner's attention, do not easily pass unobserved. What though the crises are sometimes not very manifest, because effected without any exacerbation of the symptoms which usually accompany them, and by the evacuation of matters not copious nor profuse, but rare and thin, and escaping in an unaccountable manner; they nevertheless occur, nor escape the attention of a mindful observer. In maladies of long duration, in which the patient slowly recovers, it is quite natural that we cannot notice great perturbations previous to, or simultaneous with, great crises; and it is logical to conclude that all the various secretions can and must eliminate the morbose matter through their respective emunctories in the same manner as it is gradually matured by nature in the affected organism. In proof of this, we find that slow nervous fevers improve after some weeks on account of no other evacuation than a slight general mador, sustained for several days on a skin which at first had been arid and dry; ancient, deep congestions of the liver are insensibly improved by the intervention of alvine matter somewhat dissimilar in quantity and quality to what it is naturally. How frequently occurs a particular odor of the perspiration or of the breath, a change, apparently indifferent, in the urine, all which relate to the degree of improvement observable in the course of the malady; and thus pass off unnoticed by the physician, so as to induce him to think that the disease terminated without any crisis. Critical absorptions, too, followed by critical emissions of morbose matter must, and really have several chronic affections which are also cured by the mere efficacy of nature, aided only by a simple change of air, food, system of life, by the organism entering into a different period of age, by the mere relinquishment of a false curative method, &c. Do we not, in fact, behold glandular tumors, hypertrophies of certain viscera, splænic cysts, chronic rheumatisms, dermatoses, &c., spontaneously and gradually resolve themselves? and whereas none of you can deny that all these are infirmities *cum materiâ morbosâ*, it follows that, once granted their natural recovery, they must also have gone through the process of maturation, absorption and elimination

of the said matter. An instance drawn from a serious, and unluckily in our country very frequent malady, will serve to illustrate our argument. A man becomes apoplectic from cerebral hæmorrhage, but fortunately recovers, finding himself, however, hemiplegic: after a few months, more fortunate still, without having had recourse to a physician or medicine, he recovers even the use of his limbs. Now, in this case, there was an extravasation of blood in the brain, and to the end that the patient might recover, nature was forced to absorb it, but previously to the absorption, to transform its globules and other component parts by a metamorphosis not dissimilar to that by which we see large ecchymoses resolve themselves after external contusions. Now, once absorbed, we must necessarily conclude that it must be also eliminated from the economy by some of its emunctories, or that this blood effused within our tissues (the same may be said of the humors that have degenerated and have lodged for a long time in the viscera) may, after having been re-absorbed, and as a necessary condition for the re-absorption previously transformed, may, I assert, be re-composed, and return once more to constitute an integral and reconstructive element in the mass of vital fluid. Now this second conclusion, although it seems not unreasonable when we consider the powerful resources of our economy, we are far from being able to prove; while, on the other hand, the former fully tallies with the doctrine of the crises, and is daily attested by facts minutely observed.

[To be continued.]

TWO CASES OF NODULES UPON THE VOCAL CORDS, OF PROBABLE SYPHILITIC ORIGIN.

[Read before the Boston Society for Medical Improvement, and communicated for the Boston Medical and Surgical Journal.]

By Henry K. Oliver, M.D.

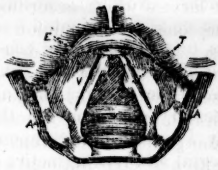
Case I.—*Extreme Hoarseness of a Year's Standing; Nodule upon each Vocal Cord.*—Mr. M., an Italian, aged 38 years, came to me on the 25th of May, 1866, for extreme hoarseness of a year's standing. His history is as follows:—General health always good. Two years previously he had a single chancre, followed some time afterwards by an eruption of the skin. Is not aware of having had swellings in the groin. Has had sore throat and "canker" in the mouth.

About a year subsequent to the appearance of the chancre he began to get hoarse, the high notes of the voice being first affected. This hoarseness has continued to increase till the present time. Has employed various remedies for this symptom, but has had, as far as can be made out, no continuous treatment for the constitutional affection.

His present condition is as follows. He appears to be in perfect health. Upon examination, the inguinal glands seem to be some-

what larger than natural. On the surface of the body no appearances are seen of a venereal character, and nothing unusual is seen in the mouth or fauces, except a slight injection of the mucous membrane of the latter. No soreness of the throat is complained of; no pain on swallowing; no difficulty in breathing; but little disposition to cough, and no expectoration. Pressure over the larynx produces no pain.

On examination with the laryngoscope, a nodule was seen on each vocal cord. The one on the left cord occupied a point half way between the anterior origin of the cord and the vocal process; it had a broad base, was white and glistening, and was of the shape and relative size as seen in the adjoining cut. The nodule on the right cord was more anterior, smaller, and more rounded, but of the same color. When the cords were approximated in phonation, the nodules came one immediately behind the other. The mucous membrane of the cords was red, and the membrane of the whole interior of the larynx and of the trachea, as far as seen, was somewhat injected.



E points to the epiglottis; A to the ary-epiglottidean fold; V lies upon the right ventricular band (false cord); T points to the nodules upon the vocal cords.

Feeling pretty confident as to the venereal character of the affection, I decided not to attempt surgical interference with the nodules, but to put the patient upon iodide of potassium, with tincture of iodine to be applied to the throat externally. In order, however, to hasten the absorption of the nodules, I determined to touch them with the solid nitrate of silver. I therefore melted a small bead upon the end of the silver probe, and seizing the moment when the glottis was closed, I touched both nodules at one thrust. Moderate spasm followed, and upon examination subsequently both nodules were seen to be tipped with a white coating.

On June 7th, I saw the patient again, when there seemed already to be a slight change in the voice for the better. On examination, the nodule on the right cord was manifestly smaller than on the first visit; that on the right was of about the same size as before, but had its mucous covering somewhat abraded. I again touched with the solid nitrate of silver, and ordered the continuance of the treatment.

Subsequently, I saw the patient weekly, each time employing the nitrate as described. The nodules continued to decrease in size—and the voice to improve correspondingly—until July 10th, when they had almost entirely disappeared, and in their place only a slight bulging could be seen. The general injection of the mucous membrane was very slight. The voice was exceedingly improved, so much so that but little change from a natural tone was observable, except in the highest notes.

With the hope of restoring the cords to their complete normal condition, I continued the treatment, and also applied the nitrate of silver occasionally, until Sept. 11th, when the bulging on the right cord had entirely disappeared, and that upon the left was with difficulty discerned. Patient could now use his voice, even in singing the high notes, with but slight change from the healthy tone. It is probable, however, that the free edge of the cord has been permanently affected, as the highest notes, in singing, are not entirely clear.

Remarks.—Affections of the larynx as a consequence of syphilitic taint are ranged among the later manifestations of the disease. The only exception to this rule is the appearance of mucous patches in the larynx, which, according to Gerhardt, occur among the secondary symptoms. This opinion is not, however, accepted by other authorities. In the case just described, the affection of the throat seems to have been the first and only symptom of the later phase of the disease. The nodules undoubtedly consisted of an inflammatory exudation into the submucous cellular tissue, which had become more or less organized into fibrous tissue. According to Dr. Wilks, the disposition of constitutional syphilis, "in the larynx as elsewhere, is to the production of lymph, which may subsequently become a tough fibrous tissue."

Case II.—*Hoarseness dependent upon a Papule upon the right Vocal Cord.*—This occurred in a male, aged 32, who came to the Massachusetts General Hospital as an out-patient in April, 1866, principally on account of an ulcer of the leg. He, however, complained of hoarseness, and was requested to come the following day for laryngoscopic examination. Before my arrival, Dr. J. Collins Warren, Surgical House-Pupil at the Hospital, made an examination, and discovered a papule upon the right vocal cord.

My notes of the case have been mislaid, but, according to my recollection, the patient confessed to having, at some time, chancres with one open bubo. He did not remember having any eruption of the skin or other secondary manifestations of syphilis. Three or four months before, he noticed a pimple on outside of left leg which broke and remained open, increasing in size to the present time. Hoarseness commenced two weeks ago; first noticed it while singing; this had increased gradually. No pain or soreness in throat. On examination, a deep ulcer three fourths of an inch in diameter, surmounting a hard infiltrated swelling, is seen in the locality above mentioned. No other manifestations of syphilitic taint are to be noticed.

The voice is moderately hoarse, and the upper notes are quite unavailable. The papule upon the vocal cord is situated on the free border, about at the middle of its length. It color is whitish; its shape is much like the nodule on the left vocal cord in Case I., though it is smaller and less prominent. The membrane of the affected cord is somewhat injected in the vicinity of the papule.

Being desirous of watching the course of the affection, an innocent gargle was ordered as a *placebo*. The patient, however, ceased to continue his visits after a week or two, during which time the papule seemed to be stationary.

During the patient's attendance at the Hospital, several of the physicians and surgeons of the institution had an opportunity of seeing the morbid appearances in the larynx.

Although the history of this case did not point so clearly as in Case I. to a syphilitic taint, yet it seemed probable that this was the source both of the ulcer on the leg and of the throat affection.

DR. WEBBER'S ESSAY ON CEREBRO-SPINAL MENINGITIS.

[Concluded from page 302.]

THESE two diseases resemble each other in almost every respect, except in reference to the eruption and where the functions of the brain are implicated; also, cerebro-spinal meningitis is by far the more severe, being fatal in a shorter time and in a larger proportion of cases.

Murchison, speaking of the convulsions which are often met with in typhus, says, "No appearance is ever found within the head to account for the convulsions." "It is now tolerably certain that convulsions occurring in the course of typhus have always a uræmic origin." Again, in speaking of the cause of the palsy which sometimes occurs, he says:—"Although the nervous system may be primarily at fault, the palsy is really due to an exaggeration of the muscular atrophy which, to some extent, is always produced by typhus." He remarks, with regard to the *post-mortem* appearances found in the head, that they rarely, if ever, show that inflammation of the brain or its membranes has been present, even as a complication. "The cerebral membranes often exhibit increased vascularity, but never any deposit of lymph or pus, indicative of recent inflammation." "The increased vascularity of the cerebral membranes in typhus must not be regarded as a sign of inflammation, and does not account for the cerebral symptoms observed during life." "In the majority of cases, where there is increased vascularity of the cerebral membranes in typhus, some impediment will be found in the pulmonary circulation, or there has been evidence of greatly impaired cardiac action. The congestion, in fact, is mechanical or passive, never active." Hæmorrhages on the arachnoid occur, but have no connection with cerebral symptoms. "Increased effusion of serum within the cranium is one of the frequent morbid appearances." "It never contains any flakes of lymph or exudation corpuscles." "The increasoed amunt of serosity within the cranium is no sign of inflammatory action, and accounts, in no way, for the cerebral symptoms during life."

These are the strongest statements I have been able to find opposed to the presence of inflammation within the cranium during typhus; and if they were correct, it would be necessary to admit that what has been called spotted fever, or cerebro-spinal meningitis, is a disease distinct from all others. But other authors do not agree with Dr. Murchison, and he has published an article in the London *Lancet* for April 22d, 1865, wherein he declares himself to have been in error with regard to the presence in typhus of inflammation of the brain. He says:—"In rare cases, typhus fever is complicated with unmistakable inflammation of the membranes of the brain. At the time of the publication of my work on Fevers, I was under the impression that this complication never occurred, but subsequent experience has convinced me that I was mistaken. In the interval I have met with two unequivocal cases of typhus complicated with true meningitis and the effusion of lymph on the surface of the brain." He also mentions having lately noticed tetanic contractions and opisthotonos.

Dr. Bartlett notices the symptoms referable to the head, pain, delirium, coma and perverted sensations; he mentions, also, the lesions of the brain observed by Gerhard, Reid, Jenner and Shattuck—engorgement of the sinuses and larger vessels of the brain, effusion of serum under the arachnoid and into the ventricles, and the presence of extravasated blood within the cavity of the arachnoid; and Dr. Clark, the editor of the fourth edition of Bartlett's "Fevers of the United States," says:—"The morbid condition of the cerebral membranes corresponded with the severity and duration of the coma." He noticed, also, a loss of transparency in the arachnoid, which was "in many instances dotted over with opaque white or yellowish white *spots*, without perceptible elevation, sometimes with distinct elevated grains." He noticed, occasionally, softening of the cortical substance.

Dr. Watson says:—"The unnatural conditions that have been sometimes noted are—slightly diminished consistence of the substance of the brain; congestion of its bloodvessels." "Now to what conclusion do these facts lead us? Why, in the first place, to the conclusion that those pathologists are in error who maintain that the essence of continued fever is *inflammation of the brain*." "Nevertheless, there may be, and there not seldom is, in these fevers, actual inflammation of the brain or its membranes; but this is an incidental complication."

Dr. Wood says:—"No clearly ascertained connection exists between the stupor and the anatomical appearances of the brain. Sometimes, however, clear evidences of encephalitis, such as injection of the membranes, opacity of the arachnoid, fibrinous exudation, and injection and softening of the substance of the brain, are presented in cases which have exhibited signs of active cerebral inflammation during life."

Cerebral inflammation is, then, acknowledged to occur in typhus, but it is a very rare complication.

The other point in which there is a dissimilarity, is the time at which the spots appear. The character of the eruption is nearly the same in both diseases. Dr. Murchison says:—"It is composed of numerous spots of irregular form, varying in diameter from three or four lines to a mere speck, which are either isolated or grouped together in patches, presenting a serpigenous or very irregular outline, and often closely resembling the eruption of measles. At first these spots are of a dirty pink or florid color, and very slightly elevated above the skin, and they disappear upon pressure; but after the first or second day, they usually become darker and more dingy, they resemble reddish-brown stains, are no longer elevated above the skin, and do not disappear, but only become a little paler on pressure. They have no defined margin, but merge insensibly into the color of the surrounding skin. These spots usually come out first over the abdomen and spread thence to the chest, back, shoulders, thighs and arms." He mentions elsewhere that in the centre of the spots there occurs at times a change into petechiæ, giving rise to three stages in their progress, though the last may not always be seen. Other accounts of the eruption of typhus so nearly agree with this that it is unnecessary to quote them.

We find almost precisely the same description of the eruption in cerebro-sinal meningitis. Surgeon Wales, U.S.N., says:—"The spots assumed the form of small, round ecchymoses, of various sizes, from the head of a pin to the size of a split pea, of a light red color, like the bites of fleas. As the case advanced, the splotches increased in size and coalesced, forming larger ones, or, properly, patches, and in bad cases assuming a livid or purplish color. Again, the form was that of reddish streaks, as if caused by striking the parts with a bundle of twigs. In all cases the eruption was even with the skin, and appeared first upon the extremities, generally the upper, and then on the face and trunk."*

Dr. Woodward, of Brandon, Vt., in an article in the *American Medical Times* for May 14, 1864, says, "The spots from which the disease has taken its name are not unlike the spots seen in enteric and typhus fever, presenting in a few cases all grades, from the rose-colored rash to the deep and permanent (under pressure) petechiæ." Many mention that the eruption resembled that of typhus. Dr. J. B. Upham notices the similarity. "Petechiæ were not an unfrequent manifestation—in appearance almost identical with the true typhus eruption, and like that seen upon every part of the body, except the face."† The color, as noticed by others, was sometimes light and sometimes dark. Dr. Burns, in one of his cases, found it bright colored, like rubeola.‡ Dr. Gerhard gives a very minute description of the eruption. They varied in size from the head of a pin to a

* American Journal of Medical Sciences, Jan., 1864.
† Boston Medical and Surgical Journal, vol. lxviii.
‡ American Journal of Medical Sciences, Jan., 1865.

quarter of an inch—were sometimes confluent. "Each spot was of a dull-red color, almost purple in some cases, varying in shade, for the most part not at all affected by pressure." "The spots were not in the slightest degree elevated above the surface." "The spots appeared usually at the end of twenty-four hours, but sometimes even sooner."*

In previous epidemics, the eruption is also described as being sometimes light colored and sometimes dark. The committee of the Massachusetts Medical Society, in 1810, described the spots as "florid and fiery. An appearance like measles has also been noticed." Dr. North says, "they varied from a common to a very dark purple." Dr. Gallup says, "they sometimes resemble petechiæ, or flea-bites, as described by writers, happening in other diseases, of a dark hue; sometimes of a brighter color."

Foreign observers do not so frequently mention the color, merely saying that petechiæ were present. Maillot says:—"The skin is very warm, dry, and presents disseminated over the body and limbs, a large enough number of spots of a deep red, irregular in form, unequal, not disappearing under pressure."†

The eruption was, then, if not identical, at least nearly so, in the two diseases, not only during the late epidemic, but in former times and in other countries.

It is necessary to account for the difference of time at which it appears. It has been stated that the eruption is due to an effusion or extravasation of blood beneath and into the cutaneous tissue. The earlier and more thoroughly the blood is disorganized the sooner this extravasation might be supposed to occur, and the darker would the eruption be, even in the first instance. The fearful rate of mortality and the very short duration of the fatal cases would lead to the conclusion that this disease causes more sudden changes in the tissues and blood than common typhus. Supposing it, then, to be only an unusually severe form of that affection, the early disorganization of the blood would be expected to occur, and the early appearance and darker hue of the eruption follows as a natural sequence, and can no longer be stated as an argument against the identity of the diseases.

The eruptions in the two diseases being identical in character, the difference in the date of their appearance being explained by the much greater severity of the disease in one case than in the other, there remain no differences between typhus and cerebro-spinal meningitis to be reconciled, except those which refer to the lesions of the brain and spinal cord.

The earlier appearance of convulsions and delirium would depend on the brain being directly affected at that time, whereas in common typhus these symptoms are not usually exhibited until a later stage, when the blood has been charged with urea or ammonia. It has,

* American Journal of Medical Sciences, July, 1863.
† Gaz. Med. de Paris, 1848.

however, been mentioned that lesions of the encephalon have been noticed as one of the complications in typhus.

The difference in the regularity of the pulse may also depend on the affection of the cerebral centres.

There is one appearance which has not been explained, the effusion of lymph in the pericardium, which occurred in two cases, and has not been mentioned in connection with typhus. But ecchymotic spots on the heart and softening of that organ have been noticed; also pericarditis and endocarditis, by Jacquot.

With regard to the treatment of typhus, Dr. Murchison, after speaking of the means to be used to prevent the generation and extension of the disease, considers the means of cure. He advocates free ventilation, supporting diet and pleasant, cooling drinks. He discountenances bloodletting. "Modern observation has shown that the effect of bloodletting in typhus is to increase the mortality; while even in the patients who recover after it, the nervous symptoms occur sooner, and with greater intensity, and are of longer duration, the eruption is darker and more copious, and convalescence is greatly retarded." He is in favor of alcoholic stimulants only to a moderate extent, and when the heart's action is weakened. Emetics are useful only at the commencement, and violent purgation is injurious. He does not speak of opium in such high terms as some who have employed it in cerebro-spinal meningitis, but he recommends its use when there is delirium, restlessness or sleeplessness; that is, when cerebral symptoms appear.

Dr. Graves advises the employment of nearly the same course of treatment.

And so, also, other authors advocate the judicious use of stimulants and a supporting diet; discountenance all that debilitates, and allow abstraction of blood only to counteract local affections.

By referring to the treatment of cerebro-spinal meningitis in the preceding pages, it will be seen that essentially the same method of treatment is used in that disease as in typhus.

If we compare, also, the causes of the two diseases we shall find a striking similarity. "Typhus is often observed to be most prevalent in the latter half of winter, in the spring and beginning of summer, and many epidemics have declined rapidly towards the end of summer;" but "epidemics of typhus appear to commence and progress irrespective of the season, so long as other known causes of the disease continue in operation." Again, "the ordinary variations of temperature, in this climate, have little influence over the prevalence of typhus."* The same author enumerates the causes of typhus—debilitating influences, as intemperance, fatigue, previous illness, destitution and privation; "exposure to cold and wet, especially if long continued, has a depressing influence on the nervous system, and so favors the advent of typhus."

* Murchison.

"Over-crowding of human beings, with deficient ventilation, is one of the most powerful predisposing causes of typhus."

All the influences here enumerated have been noticed in preceding pages as predisposing causes; the evidence would rather indicate that season and the state of the weather had more influence than Dr. Murchison concedes to them; but the facts are not, perhaps, sufficiently numerous to make any positive statement.

The principal agent, in many cases, in causing typhus, the exciting cause—contagion—is thus mentioned by Dr. J. B. Upham in his little book, "Typhus Fever in Great Britain":—

"And yet the disease should not be held as contagious in the same sense that smallpox is contagious; i. e., that it is invariably and virulently so. Certainly the sphere of action is more limited—the communication of the poison more dependent on circumstances—and the morbific influence more within the control of sanitary laws and regulations, than in the usual zymotic or so-called contagious maladies. It may be stated as a general rule, that the contagion, to be effectual, must be concentrated by the crowding together of patients—or accumulated and aggravated in ill-ventilated and pent-up rooms—or stimulated by the conjunction of other unfavorable hygienic conditions—ill draining, filth, effluvia, &c. &c.—or the recipient have been previously subjected to the predisposing causes by deprivations, hardship and want, excesses, anxiety, fear, despondency, mental and physical exhaustion or debility from any cause, till his system has been brought to a point below the power of resistance." In a note he adds:—"I am aware there are many apparent exceptions to this rule. Instances are on record, some of which have occurred in the experience of the writer, where persons exposed to isolated cases have received the contagion."

It is hardly necessary to extend the quotations; all authors agree on these points in every important respect. Possibly Dr. Upham does not lay so much stress on the influence of contagion as some.

If it is possible to classify any epidemic under a disease already described and recognized, it would be erroneous to establish a new species on account of slight differences which are easily accounted for.

There is almost an exact agreement between these two diseases in the symptoms and *post-mortem* appearances, except in reference to those dependent upon lesions of the cerebro-spinal system. The causes and treatment are essentially the same. We must conclude, then, that epidemic cerebro-spinal meningitis is only epidemic typhus, wherein, from some cause, the cerebro-spinal system is the principal seat of the attack.* By this classification the great variety in the

* It may not be uninteresting to notice that about the time when the cerebral form has prevailed, on each occasion, there has been a subject which agitated the people very generally, and caused much public discussion. Thus between 1807–14 there were the difficulties with Great Britain; from 1819 to 1827 there was more or less discussion of the slavery ques-

symptoms is more easily explained, and the epidemics in which the pneumonic form was most frequently seen were true typhus, less frequently complicated with lesions of the brain.

SIMPLE APPARATUS FOR THE TREATMENT OF FRACTURES. CASE—FRACTURE OF THE LEG IN AN EPILEPTIC.

[Read before the Norfolk District Medical Society, Nov. 14th, 1866, by WILLIAM H. CAMPBELL, M.D., of Roxbury.]

THE value of any useful invention is always enhanced by its simplicity, and yet further increased by its cheapness and the facility with which it can be obtained.

In the surgical branch of our profession, there is a constant stream of new methods and of new kinds of apparatus for the treatment of disease or injury. Many of these are very useful, but nearly all are expensive and require the skill of a practical mechanic to prepare them. In the treatment of fractures this is especially true. Most kinds of apparatus are so complicated and costly, that they are not available in private practice, except to a very limited extent, as it would require a small fortune to set up in business a practitioner who aspired to have the half of a required outfit.

Some of these disadvantages have been obviated (at least for the country practitioner) by such contrivances as the "fracture-bench," made use of and described some time ago by a member of this Society, and which recommends itself at a glance to any practical man at all acquainted with the subject (see Boston Medical and Surgical Journal, Feb. 13th, 1862, p. 37), and the simple apparatus for fracture of the thigh (Ibid., Sept. 19th, 1861, p. 129) used and described by another member.

The object of the present paper is to call attention to a splint which I have tried and found to be all that can be desired—being cheap, easily obtained, very light, sufficiently strong for all practical purposes, and readily adjusted to fractures in almost any situation; and, further, it can be prepared on the spot by the surgeon himself, from materials which may be found in almost every house. It consists of a splint made from ordinary pasteboard (binders' board is better, but the fragments of an old pasteboard box will answer for most purposes), strengthened by a strap of hoop-iron.

The board should be cut to a suitable shape and the iron band

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tion, resulting in the Missouri Compromise in 1821, and parties were so nearly equal that no election of President was made in 1824, and the choice devolved upon the House of Representatives. In 1846, the war with Mexico commenced and continued two years. In 1861 was the commencement of the late epidemic, synchronous with the late rebellion, though excitement existed previously in a slighter degree. In France, from 1836 to 1848, political excitement existed, which ceased only after Louis Napoleon became Emperor. Later, at Dantzic and other German cities, where the disease has prevailed, there has been the Schleswig-Holstein question, which has aroused the people.

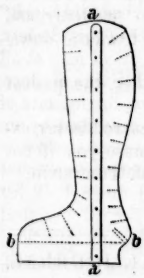
Thus, we see that, during each of the great epidemics, there has existed one or more questions upon which the people thought much, having their sympathies and passions excited. Had this mental agitation any influence in causing the cerebro-spinal form of the complaint?

riveted to it, which is a very simple process, requiring no tools but a hammer and a punch or brad-awl to make the holes in the iron. The rivets (the head ends of common nails will answer) may be placed at intervals of two or three inches, or thereabout. After the iron is secured, the board may be wet or otherwise softened, and formed to the shape of the limb. It may then be padded with cotton, applied to the part, and secured by a bandage in the ordinary way. This makes a very neat, light, and exceedingly firm apparatus.

In illustration of its value, I will give the following case:—Louis A., æt. 16; epileptic; in poor circumstances; fell from a fence and fractured both bones of the right leg—the tibia at the middle, the fibula about two inches higher. The lower fragment of the tibia rode upon the upper in front, and nearly penetrated the skin.

As the fits occurred daily, it was necessary to put on apparatus that would be firm, and not easily displaced. I was somewhat at a loss how to proceed—not being content with anything in common use—when a professional friend showed me one made as above described, which recommended itself at once as being most suitable. So without hesitation I adopted it.

I took two pieces of stout pasteboard, cut in the form of the figure in the margin, and wide enough to nearly encompass the limb, leaving only a small space before and behind. To each of these pieces I riveted strips of hoop-iron, running longitudinally, *a a*. The lower part of the board, and the iron below the dotted line *b b*, were turned up to a right angle with the leg part, to form the foot-piece, and the leg part so bent as to fit the swell of the leg, and to prevent pressure upon the malleoli.



Thus prepared, the boards were dampened and moulded in proper form, and the fragments being adjusted, the splints, well padded with cotton wadding, were applied and secured by a single headed roller bandage from the toes to a short distance above the knee. The apparatus seldom needed re-adjusting, but I examined it occasionally to see that no undue pressure was made on any part.

The patient continued to have the fits—sometimes two or three in a day—during the greater part of the treatment, but without disarranging the apparatus. He even fell out of bed on one occasion, and was put in again by the family, without injury to the leg. He rolled about the bed at will, and took any position he desired, the lightness of the splint not hindering such motions, while the foot-piece prevented any displacement laterally or downward.

The result in this case was indeed very satisfactory. Applied as now recommended, I believe this pasteboard and iron splint to be as good as the starch bandage or plaster of Paris, in cases where they

are applicable, and better in some instances; besides being suited to a greater number of cases on account of its greater lightness and strength; and, further, it is more readily obtained and more easily applied.

Another advantage is, that it can be adapted to fractures in almost any part, a little ingenuity on the part of the surgeon being all that is necessary. The material is always at hand—a piece of bandbox and an old hoop being usually at hand in almost every house. Even if we have to go to a shop for the material, it is inexpensive, which is of great moment in practice among the poor.

I do not claim originality in this matter—possibly it may have been often tried before—but I merely wish to call the attention of the profession to the subject as one well worth consideration.

DISLOCATION OF THE HUMERUS FROM A SINGULAR CAUSE.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—I send you a brief item of a dislocation of the humerus from a singular cause.

J. P., middle aged, tall, very muscular, knocked the bung from a large cider cask. The cider, fermenting, poured out, and he, with his extended arm, attempted to stop it, but the expansive force of the liquid threw his arm upwards and outwards so suddenly, and with such violence, as to dislocate the head of the humerus downwards and inwards under the pectoral.

The dislocation was readily reduced without ether, the patient being a little faint.

Among all the causes of dislocation that have occurred in my experience this stands alone, and I thought it might amuse you, if not the readers of the JOURNAL. Yours, G. J. TOWNSEND.

South Natick, Nov. 16th, 1866.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON. THURSDAY, NOVEMBER 22, 1866.

HASCHISCH CANDY.

IT is well known that quite serious, sometimes fatal effects are caused by eating confectionery which is colored by poisonous quantities of mineral salts, and analyses have frequently proved that the brilliant reds, greens and yellows, which are so attractive to children, are often only sugared preparations of arsenic, lead, and other dangerous substances. These pigments are not used, however, we are sure, by confectioners of good standing, and although the coloring matters generally employed for such purposes would not add to the

enjoyment of the lovers of these sweets were their true nature known, they are at all events harmless. Within a short time, a candy has been largely manufactured and advertised in the newspapers for public sale which is openly stated to contain a powerful and dangerous drug. Those who are engaged in this nefarious business rely also for its general introduction and consumption upon the popular descriptions which have been published within a few years of the pleasing effects of Haschisch upon the human system, of the delightful visions and care-dispelling trances it occasions, and upon the illuminated and suggestive representations of eastern scenes exhibited by them in the shops to attract the attention of the passer-by to its seductive properties.

With the physiological effects of Indian Hemp the profession is generally familiar, and although these are widely modified according to individual temperament and the uncertain character of the drug as found in our market, all would consider it a narcotic by no means to be trifled with. How much of its celebrity is due to the imaginative and sensual nature of the Orientals and to the custom of mixing it with opium and other highly stimulating substances which prevails among them is uncertain, but we know that here its administration is seldom productive of the delights which are anticipated. It seems to have been often used in the East for the direct purpose of producing a helpless intoxication, for we read in the story of Aladdin Abushamat how his wife put some bhang into the cup of her father, and "he drank the cup, and fell down upon his back. She then came to Aladdin and said to him, Thine adversary is laid prostrate upon his back, so do with him what thou wilt; for I have intoxicated him, and stupefied him with bhang. Aladdin therefore went in and beheld him stupefied with bhang; and he bound his hands tightly behind him, and chained him; after which he gave him the antidote of bhang, and he recovered his senses." In another of the Arabian Nights' tales it is related that, "when Ali Shir heard these words, he sat and ate with him a little; and was about to take up his hand, when the Christian took a banana, peeled it, and divided it in two, and put into one half of it some refined bhang, mixed with opium, a dram of which would make an elephant to fall down. Ali Shir took it from him and swallowed it, and scarcely had it settled in his stomach when his head fell before his feet, and he became as though he had been a year asleep." It sometimes produces active delirium or a state of catalepsy, and when given in overdoses, convulsions. Although never, that we are aware, directly causing death under these circumstances, the symptoms are frequently alarming, and its habitual use is followed by the same fatal consequences as that of opium, alcohol, and other cerebral stimulants.

How largely Cannabis indica is used amongst us for purposes of pleasurable intoxication cannot of course be definitely known, but we believe much more generally than is commonly supposed. Within six months, we have twice been called in the night time to attend persons, previously unknown, who exhibited its poisonous effects to an alarming extent, from eating this same Haschisch candy. On inquiry, we found that one of the patients had often taken it before, and that many of her friends were accustomed to do likewise. If the experience of other physicians at all corresponds to ours, limited as it

has been to two neighboring and contiguous streets, the instances of an overdose being of course in small proportion to the extent of its general use, the custom must prevail to a wide and injurious extent. If the manufacture of this candy cannot be prohibited or its sale restricted in this country by law, the public should at all events be made acquainted with its dangerous character.

DEATH OF DR. WILLIAM E. TOWNSEND.

It is our painful duty to record the death of Dr. William E. Townsend, who succumbed to the choleraic poison, after an illness of a few hours, on Saturday last. Dr. Townsend had been a member of the profession for twenty-two years. Educated at the public Latin School of this city, a graduate of Harvard University, well reported of at school and college, he had fulfilled the promise of his youth. Each year was marked by improvement. Conscientious, faithful and tender in the discharge of all duties as a practitioner, a friend, a son, a husband and a father, his departure is a great loss. Mindful of all obligations to his fellow men, he neglected neither the service nor the worship of his God. The father, who survives him, and towards whom the sympathies of his professional brethren naturally flow, may be comforted in his great bereavement with the assurance that the good example, the wise precepts, the judicious training have been proved in many years of active usefulness, and that the kindly ministrations to the poor and afflicted which so characterized the departed, are recorded as done to the Master whom he served, and in whose presence the souls of the faithful enjoy a perpetual rest and felicity.

Messrs. Editors,—I think the profession generally will thank you for your article in a recent issue of the Journal on the subject of the "Inconsistencies of the Press." May it prove to be the entering wedge in the reform of so reprehensible a custom as the indiscriminate advertising of quack medicines. At present, as is well known, the better class of English newspapers refuse these obnoxious advertisements altogether. On looking over the Boston *Post* of Oct. 15th, I found the following, taken from an exchange:—"A pill-box factory in Bristol, Vt., uses up three hundred cords of birch wood per annum." The *Post* adds, "and the pills create a demand for as many more cords for coffins." It instantly occurred to me that the good work had begun with us, too, and that one paper at least would be found exhibiting some degree of consistency. I was, however, astonished, upon looking over the advertising department of files of this paper, to find that there were two or three advertisements of "sure remedies for special diseases," one of a "discovery which cures every disease that flesh is *heir* to" by applying it to the scalp, one of pills to procure abortion, and a number of advertisements of "bitters," which is another name for very poor whiskey. Here, I thought, is inconsistency palpable enough. My eye was, however, soon arrested by the notice of a New Cemetery about to be opened in a most delightful and attractive locality, and also by one of "Crude Sulphur for Sale," and I left the perusal with the feeling that there was consistency in the *Post* after all, at least in its advertisements. D.

Messrs. Editors,—The *Homœopathists* pretend to treat disease by a *like suffering; Allopathists* (pretending or not) often create *another suffering* quite unnecessarily; *Nullopathists,* if the word means anything, would have *no suffering* at all in their treatment. Now, as the *Rational Physician* attempts this, and to assuage such as arises spontaneously in the course of a disease, as well as to lessen its dangers, the Rational Physicians of Boston and vicinity may well thank the *Pacific Medical and Surgical Journal* for its just appreciation of their efforts in the name it so courteously applies to them—cited in your last number.

A RATIONAL PHYSICIAN.

Treatment of Cholera by the American Missionaries in Constantinople.—The following extract, which should have followed the "Statistics of Success in the Treatment of Cholera," published in last week's JOURNAL, was accidentally omitted:—

"Our main reliance has been upon a mixture composed of equal parts of laudanum, tinct. of rhubarb, and spts. of camphor.* The ordinary dose is thirty drops, but when a second dose has been necessary, we have generally doubled it. We have often given sixty drops, or a large teaspoonful, for the first dose, when the case was severe. In two cases, where there were both severe vomiting and diarrhœa, I gave ninety drops the first dose with the best effect; both patients recovered. This medicine is intended especially for the diarrhœa. When it has been difficult to check the vomiting, we have given another mixture, which we call 'mixture No. 2.' It is composed of equal parts of tr. opii, tr. capsici, tr. sem. cardamomi, and tr. zingiberis. This 'No. 2' has often proved very efficient; dose, thirty to forty drops, or more, according to circumstances. We have put strong mustard plasters immediately, in almost all cases, on the feet and stomach. When the feet and arms have been cold, we have had them rubbed rapidly with rum or brandy, have applied bottles of hot water or hot bricks, and have taken other means to produce heat and circulation of the blood in the extremities. In many cases, these external applications have had a good and decided influence. In a few cases we have stopped the diarrhœa by injections of starch and laudanum. It has been necessary to forbid the use of water *entirely.* Many of the patients who have persisted in the use of water have died; others have been saved with great difficulty. Of course, the patient should eat nothing till the crisis of the disease has passed, and the patient begins to recover. Here has been one of our greatest troubles; the natives think that unless they take a large supply of food they cannot recover their strength. Several have thus brought on fatal relapses."

Medical Intelligence.—The *Gazette des Hopitaux* announces that M. Trousseau has resigned his position at Hotel Dieu; also, the resignation of Cazenave at San Louis.

The observation first made by Drasche, of Vienna, that urea is some-

* This medicine is generally known as the "Hamlin Mixture." It was introduced at Constantinople by the Rev. Cyrus Hamlin, D.D., an eminent American missionary, and has been used by him with great success in the three terrible visitations of the cholera in that city. It was prepared by some of the principal druggists in Constantinople during the prevalence of cholera in 1865, and great quantities were sold and used with marked and happy results.

times found as a crystalline deposit on the surface of the skin in the typhoid period of cholera, has been confirmed in cases of uræmia by M. Hirschsprung. It is found as a fine white powder. The absence of perspiration in these cases seems to show that it is excreted by the sebaceous glands.

Under the heading, Medical Martyrology, the *Lancet* announces the death of Dr. Gunther, chief of the surgical clinique at Leipsic; of the orthopædist, Dr. Klopsch at Breslau; of Liharzik, Surgeon to the Emperor of Austria, at Vienna; and of eleven Prussian Army surgeons of cholera.

A new Journal of Anatomy and Physiology, to be published semi-annually by McMillan & Co., under the direction of Professors Humphrey and Newton of Cambridge, Dr. Turner of Edinburgh, and Professor Wright of Dublin, is announced.

The following programme has been proposed by the Committee for the International Medical Congress, which, as we informed our readers some time ago, is to be held in Paris next August, and those who desire to bring forward communications on these subjects are requested to address their manuscripts to the General Secretary. 1. The Anatomy and Pathological Physiology of Tubercle—on Tuberculization in different countries and its influence on general mortality. 2. The general accidents which cause death after surgical operations. 3. Is it possible to propose to the various governments efficacious measures for restraining the propagation of venereal diseases? 4. On the influence of the dietary of different countries in the production of given diseases. 5. On the influence of climate, race and different conditions of life on menstruation in various countries. 6. On the acclimatization of European races in tropical countries. 7. On the entozoa and entophytes which may be developed in man.

Dr. Hall, Inspector-General of British Hospitals, recently died from an overdose of colocynth.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, NOVEMBER 17th, 1866.

DEATHS.

	Males.	*Females.*	*Total.*
Deaths during the week - - - - - - -	37	38	75
Ave. mortality of corresponding weeks for ten years, 1855—1865	37.8	38.0	75.8
Average corrected to increased population - - - - -	00	00	82.2
Death of persons above 90 - - - - - - - - -	0	1	1

BOOKS AND PAMPHLETS RECEIVED.—Notes on Epidemics. For the use of the Public. By Francis Edmund Anstie, M.D., F.R.C.P., Senior Assistant Physician to the Westminster Hospital. First American Edition. Philadelphia: J. B. Lippincott & Co.—Transactions of the Medical Society of the State of Pennsylvania, at the Seventeenth Annual Session, held at Wilkesbarre, June, 1866.

DEATHS IN BOSTON for the week ending Saturday noon, Nov. 17th, 75. Males, 37—Females, 38. Congestion of the brain, 2—disease of the brain, 3—bronchitis, 2—cancer, 1—cholera, 1—cholera morbus, 1—consumption, 21—croup, 1—diarrhœa, 2—diphtheria, 1—dropsy of the brain, 2—dysentery, 1—scarlet fever, 3—typhoid fever, 2—disease of the heart, 3—disease of the kidneys, 1—congestion of the lungs, 1—gangrene of the lungs, 1—inflammation of the lungs, 5—marasmus, 2—old age, 4—peritonitis, 1—premature birth, 2—rheumatism, 1—smallpox, 1—suicide, 1—unknown, 5—uræmia, 1—inflammation of the uterus, 1—whooping cough, 3.

Under 5 years of age, 23—between 5 and 20 years, 7—between 20 and 40 years, 22—between 40 and 60 years, 16—above 60 years, 7. Born in the United States, 46—Ireland, 21—other places, 8.